This Page Is Inserted by IFW Operations and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

As rescanning documents will not correct images, please do not report the images to the Image Problem Mailbox.

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the

application:

LISTING OF CLAIMS:

(Previously Presented) An ink cartridge for use with a recording apparatus, 1.

which comprises an ink pack formed from flexible material and sealingly storing ink therein, and

a cartridge case housing the ink pack and formed hermetically, and which is so constructed that

pressurized air is introduced into the case in a mounted state to the recording apparatus, wherein

on one surface of the cartridge case, there are provided positioning means used when the

cartridge is mounted to the recording apparatus, an ink outlet port from the ink pack, an inlet port

for the pressurized air, and a connection terminal of a circuit board having data storage means;

the positioning means being constructed by an opening hole formed so as to surround a

positioning pin arranged in the recording apparatus;

the opening hole constituting the positioning means arranged at each of two locations

along a longitudinal direction on the one surface of the case; and

the connection terminal of the circuit board and the inlet port for the pressurized air being

respectively arranged outside the opening holes arranged at the two locations.

2 - 3. (Canceled).

2

AMENDMENT UNDER 37 C.F.R. § 1.116 U.S. Application No. 09/937,130

Attorney Docket No.: Q66313

4. (Previously Presented) An ink cartridge for use with a recording apparatus according to claim 1, wherein the ink outlet port from the ink pack is arranged substantially in a center between the opening holes arranged at the two locations.

5. (Canceled).

6. (Currently Amended) An ink cartridge for use with a recording apparatus, the ink cartridge including a circuit board having data-readable storage means in which ink information can be stored, and a contact for electrical connection between the storage means and the recording apparatus when the ink cartridge being is removably mounted to the recording apparatus, wherein

the circuit board further includes a contact with has a contact face, the contact face being openly exposed in relation to the ink cartridge at least on a plane substantially parallel to the contact face and a plane substantially perpendicular thereto; and

when the ink cartridge is mounted to the recording apparatus the circuit board contact electrically connects to the recording apparatus.

7. (Previously Presented) An ink cartridge for use with a recording apparatus according to claim 6, wherein the circuit board is attached to the ink cartridge via heat welding.

- 8. (Previously Presented) An ink cartridge for use with a recording apparatus according to claim 7, wherein the heat welding forms projections in the ink cartridge to which the circuit board is mounted.
- 9. (Original) An ink cartridge for use with a recording apparatus according to any of Claims 6 to 8, wherein an ink pack that is formed from flexible material and sealingly stores ink therein is housed in the cartridge case, and pressurized air can be introduced into the case in a mounted state to the recording apparatus.
- 10. (Currently Amended) An ink cartridge for use with a recording apparatus, which comprises an ink pack formed from flexible material and sealingly storing ink therein, and a cartridge case housing the ink pack and having an outer shell formed hermetically, and which is so constructed that pressurized air can be introduced into the case in a mounted state to the recording apparatus, wherein

in case that the ink cartridge is mounted to the recording apparatus, after an ink outlet port formed on the ink cartridge is connected to the recording apparatus, a pressurized air inlet port formed on the ink cartridge is connected to the recording apparatus after an interior of the ink pack is in fluid communication with the recording apparatus through an ink outlet port formed on the ink cartridge, an interior of the cartridge case is in fluid communication with the recording apparatus through a pressurized air inlet port formed on the ink cartridge.

Attorney Docket No.: Q66313

11. (Original) An ink cartridge for use with a recording apparatus according to Claim 10, further comprising:

positioning means provided to the cartridge case, which is used in case that the ink cartridge is mounted to the recording apparatus, and

wherein the ink outlet port and the pressurized air inlet port are sequentially connected to the recording apparatus in a state where, a positional relation of the ink cartridge with respect to the recording apparatus is determined by the positioning means.

12. (Original) An ink cartridge for use with a recording apparatus according to Claim 10, further comprising:

data-readable storage means that can store therein information data relating to ink sealingly stored in the ink pack, and

wherein in case that the ink cartridge is mounted to the recording apparatus, after the pressurized air inlet port is connected to the recording apparatus, the storage means is electrically connected to a terminal mechanism on the recording apparatus.

13. (Original) An ink cartridge for use with a recording apparatus according to any of Claims 10 to 12, wherein the pressurized air inlet port provided to the ink cartridge is formed in a shape of a hollow cylindrical member formed integrally with the cartridge case, and

5

an axial length of a cylindrical surface of the cylindrical member constructing the inlet port is set to 2-20 mm.

- 14 49. (Cancelled).
- 50. (Previously Presented) A recording apparatus, comprising:

connectivity for attaching an ink cartridge, said connectivity including ink connectivity, pressurized air connectivity and electrical connectivity; wherein

said electrical connectivity completes an electrical circuit when said ink cartridge is mounted to said recording apparatus, said electrical connectivity enabling a pressure pump that pressurizes pressurized air to be exchanged via said pressurized air connectivity between said recording apparatus and said ink cartridge.

51. (Previously Presented) An ink cartridge for use with a recording apparatus, comprising:

an ink pack formed from flexible material and sealingly storing ink therein;

a cartridge case which houses the ink pack and possesses a surface;

an ink outlet port that extends from the ink pack, said ink outlet port disposed on said surface;

a pair of positioning parts located opposite from one another with respect to the ink outlet port, said positioning parts disposed on said surface;

an air inlet port that is disposed on said surface; and

a connection terminal of a circuit board having data memory, the terminal being located opposite from the air inlet port with respect to the ink outlet port, said connection terminal disposed on said surface.

52. (Previously Presented) The ink cartridge of claim 51, wherein a first of the positioning parts is located between the air inlet port and the ink outlet port; and

a second of the positioning parts is located between the connection terminal and the ink outlet port.

- 53. (Previously Presented) The ink cartridge of claim 52, wherein each of the positioning parts includes at least one of a hole, a groove and a notch.
- 54. (Previously Presented) The ink cartridge of claim 10, wherein an electrical connection is complete between the recording apparatus and the ink cartridge when said ink cartridge is mounted on said recording apparatus, said electrical connection comprising an electrical circuit enabling a pressure pump that pressurizes said pressurized air.

AMENDMENT UNDER 37 C.F.R. § 1.116 U.S. Application No. 09/937,130

55. (Previously Presented) The ink cartridge of claim 10, wherein the ink outlet port comprises a valve member.

Attorney Docket No.: Q66313

- 56. (Previously Presented) The ink cartridge of claim 10, further comprising an ink inlet port and a valve located upstream of the ink inlet port.
- 57. (New) The ink cartridge of claim 51, wherein said ink outlet port, said air inlet port, and said connection terminal are disposed so as to create a substantially linear line along a lengthwise direction of said surface.